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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/309,412	05/10/1999	KAZUHIRO HARA	450100-4879	7480
20999	7590	12/29/2006	EXAMINER	
FROMMER LAWRENCE & HAUG			JACKSON, JENISE E	
745 FIFTH AVENUE- 10TH FL.			ART UNIT	PAPER NUMBER
NEW YORK, NY 10151			2131	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/29/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/309,412	HARA, KAZUHIRO
	<b>Examiner</b>	<b>Art Unit</b>
	Jenise E. Jackson	2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 17 October 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____ .                        |

## DETAILED ACTION

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 20-37 of copending Application No.10/824985. Claims 1 and 11 are independent claims and since they are rejected under double patenting, all the dependent claims are rejected under double patenting. Therefore, Claims 1-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting.

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons listed below:

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Application 09/309412 Claims 1 and 11	Application 10/824985 Claim 20
A data transmission controlling method for controlling transmission of data from data transmitting means to data receiving means over at least first and second communication channels, data communication controlling	A data transmission controlling method for controlling transmission of data from data transmitting means to data receiving means over communication channels
Transmitting data encrypted by the data transmitting means to the data receiving means over the first communication channel provided for data transmission from the data transmitting means to the data receiving means	For causing the data transmitting means to encrypt data and transmit the encrypted data to the data receiving means over the communication channels, the data transmission controlling method including
Wherein prior to transmitting the encrypted data over the first communication channel, the data transmitting means encapsulates data	Encapsulated the data to be transmitted in multiplexed fashion in accordance with a <b>first protocol</b>
Wherein at least one of the data capsules resulting from the encapsulation is encrypted	Encrypting at least one of data capsules resulting from the encapsulation
Wherein the data to be transmitted is first encapsulated in accordance with the first protocol and further encapsulated in accordance with a second protocol	Encapsulated the encrypted data capsules in accordance with a second protocol
Wherein the data transmitting means supplements an encrypted data section with a section header containing destination address information; and transmitting restrictive data transmission control information to the data receiving means over the second communication channel having a smaller capacity of data transmission than the first communication channel, the second communication channel including communication channels installed independently of the first communication channel; wherein the restrictive data transmission control information transmitted over the second	

communication channel is operating to allow only intended data receiving means to receive the encrypted data, and is configured to substantially simplify decryption of the encrypted data transmitted over the first communication channel

It would have been obvious that the encapsulating step is performed according to a specific protocol, the motivation is that data going across the network can perform accordingly to a certain protocol. Claim 1 of application 09/309412 and Claim 32 of 10/824985 are rejected under provisional obviousness double patenting. Claim 32, is similarly rejected under double patenting, limitations have already been addressed above. Further, claim 32 contains additional limitations, such as “the encryption key, “decrypting method”, and “decrypt the encrypted data which are updated frequently, and the one of the decryption keys being selected in accordance with the encryption key information attached to the encrypted data”. It would have been obvious to have an encryption key, in order to transmit encrypted data one must have an encryption key. It would have been obvious to have a decryption key, because in order to view the data after transmission step, one must have the decryption key. It would have been obvious to one of ordinary skill in the art that updating keys is a very efficient method when transmitting data across the channels, because it insures that a new key is generated and the key is used for a limited time; thereby increasing security.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 8-14, 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seth-Smith(4,829,569) in view of Gotwald(5987,518).

5. As per claim 1, 11, Seth-Smith et al. discloses a data transmission controlling method for controlling transmission of data from data transmitting means to data receiving means over at least first and second communication channels(col. 3, lines 14-18, fig. 1, sheet 1), said data transmission controlling method includes, transmitting data encrypted by said data transmitting means to said data receiving means over a first communication channel provided for data transmission from said data transmitting means to said data receiving means(see col. 3, lines 14-22, fig. 1, sheet 1); wherein prior to transmitting the encrypted data over the first communication channel(see col. 6, lines 45-64, and wherein the data transmitting means supplements an encrypted data section with a section header containing destination address information(see col. 6, lines 30-64); and transmitting restrictive data transmission control information to the data receiving means(see col. 6, lines 30-49) over a second communication channel, having a smaller capacity of data transmission than said first communication channel(see col. 6, lines 49-57, fig. 1, sheet 1). The Examiner asserts that Seth-Smith inherently discloses the second communication channel has a smaller capacity, because Seth-Smith discloses one channel can be a landline.

Therefore, the teletext information is transmitted in clear text over the landline or satellite (see col. 6, lines 49-52). Seth-Smith discloses wherein the restrictive data transmission control information transmitted over the second communication channel is operating to allow only intended data receiving means to receive the encrypted data, and is configured to substantially simplify decryption of the encrypted data transmitted over the first communication channel(see col. 3, lines 14-22, col. 6, lines 49-65). Seth-Smith discloses restrictive data transmission control information transmitted over the second communication channel(i.e. landline) that is installed independently of the first channel, because Seth-Smith discloses the system of the invention permits the user to communicate with the broadcaster(see col. 6, lines 65-67). The user may request addition of a service, or to pay a bill or the like(see col. 7, line 1). Seth-Smith discloses that the telephone system are suited for this function(see col. 7, lines 1-4). Further, Seth-Smith disclose no uplink facility at the user's station need to be provided(see col. 7, lines 1-6). Thus, Seth-Smith discloses that the satellite first channel is not used, to provide to user's an addition of a service.

6. Seth-Smith is silent on the data transmitting means encapsulates data to be transmitted from the data transmitting means to data receiving means into data capsules in accordance with a first protocol and a second protocol, wherein the data transmitted is first encapsulated in accordance with the first protocol and further encapsulated in accordance with the second protocol. Gotwald discloses data transmitting means(see col. 3, lines 45-50) encapsulates data to be transmitted from the data transmitting means to data receiving means into data capsules in accordance with a first protocol and a second protocol, wherein the data transmitted is first encapsulated in accordance with the first protocol(i.e. ip/internet protocol) and further

Art. Unit: 2131

encapsulated in accordance with the second protocol(i.e. mpeg)(see col. 2, lines 3-13,17-19, see col. 3, lines 56-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the encapsulation method of Gotwald with Seth-Smith, because encapsulating data is a more efficient method of transmitting information over the network, that can be packaged using a lower level protocol such as mpeg of Gotwald and then the data can be sent over the network.

7. As per claim 2, Seth-Smith wherein said second communication channel is a communication channel permitting bi-directional communication between said data transmitting means and said data receiving means, is inherent in Seth-Smith, because Seth-Smith discloses that the user can communicate with the broadcaster(see col. 6, lines 49-67).

8. As per claims 3, 12, Seth-Smith wherein said data transmitting means performs data encryption using an encryption key and wherein said encrypted data from said data transmitting means are decrypted by said data receiving means utilizing a decryption key identical to said encryption key used in the data encryption(see col. 3, lines 23-27, col. 20, lines 22-34). The Examiner asserts that the keys must be identical in order to decrypt information, that insures that the proper individual receives information; this is disclosed in Seth-Smith et al.

9. As per claims 4, 13, Seth-Smith et al. discloses wherein said encryption key and said decryption key are session keys(i.e. service key) for encrypting and decrypting information and data(see col. 3, lines 14-22, col. 10, lines 38-42, col. 22, lines 9-36, 57-60).

10. As per claims 5, 14, Seth-Smith discloses wherein said session keys(i.e. service keys) are updated at predetermined intervals(see col. 11, lines 66-67, col. 12, lines 1-8, col. 19, lines 33-37).

Art Unit: 2131

11. As per claims 8, 17, Seth-Smith discloses said first communication channel is a satellite link permitting unidirectional communication from said data transmitting means to said data receiving means; and wherein said second communication channel is a communication channel permitting bi-directional communication between said data transmitting means and said data receiving means(see col. 6, lines 49-55).

12. As per claims 9-10, 18-19, Seth-Smith inherently discloses wherein said data receiving means is constituted as an IP router, and bridge, because Seth-Smith discloses a subscription television system that uses a satellite to transmit data(see abstract).

13. Claims 6-7, 15-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Seth-Smith et al. in view of Gotwald further in view of Mueller.

14. As per claims 6, and 15, Seth-Smith-Gotwald combination discloses data transmitting means and said data receiving means, and discloses session keys(see above already addressed as per claim 1 and 4).

15. As per claims 6 and 15, Seth-Smith et al. is silent on a master key that encrypts and decrypts session keys.

16. However, Mueller discloses a master key that encrypts and decrypts session keys(see col. 1, lines 46-61).

17. It would have been obvious to one ordinary skill in the art to combine the teachings of Mueller within the system of Seth-Smith-Gotwald combination, because secure session key generation methods, such as Mueller offer distinct advantage that the intercepted, encrypted messages based on the session key cannot be decrypted at a later time even if access to the actual encryption system is gained(see col. 2, lines 1-7 of Mueller).

Art Unit: 2131

18. As per claims 7, 16, Seth-Smith discloses said data transmitting means possesses said session keys corresponding to all data receiving means authorized to receive specific information and data; and wherein said data transmitting means transmits in advance said session keys to said data receiving means authorized to receive specific information and data(see col. 21, lines 49-65, col. 22, lines 9-34).

### **Response To Amendment**

19. The Applicant has amended independent claims 1 and 11 and stated that the amended subject limitations is not disclosed in the prior art of Seth-Smith. The Applicant has provided a mere allegation of by stating that Seth-Smith does not disclose the amended limitations without providing any rationale. Second, upon the Examiner search new art has been applied to the newly added limitations(see above for explanation).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jenise E Jackson whose telephone number is (571) 272-3791.

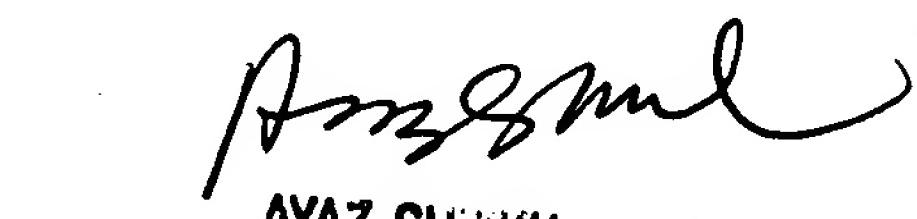
The examiner can normally be reached on M-Th (6:00 a.m. - 3:30 p.m.) alternate Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



December 23, 2006



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